IN THE SPECIFICATION:

Please amend the specification as follows:

(1) The paragraph from page 17, line 12 to page 17, line 25 has been amended as follows:

Figure 7A is a cross ~~section~~ sectional view of the contact structure of the present invention and a space transformer for use in a probe contact assembly. The contact structure having the contactor carrier 222 and the cantilever contactors 230 is the same as that shown in Figure 6. The space transformer 250 is to transform (fan-out) the pitch of the contactors 230 to a larger pitch to match with electrodes (input terminals) on a probe card (Figures 8 and 9) or on a flexible PCB (Figure 10). Thus, the space transformer 250 has solder bumps 255, interconnects 253 and upper electrodes 257 to enlarge the pitch between the solder bumps 255 to the pitch between the electrodes 257. Typically, the space transformer is made of a multi-layer ceramic substrate with signal patterns.

(2) The paragraph from page 18, line 11 to page 18, line 21 has been amended as follows:

Figure 7B shows a cross ~~section~~ sectional view of the contact structure and the space transformer of the present invention similar to that shown in Figure 7A. The difference from the example of Figure 7A is ~~that,~~ that the space transformer is formed by the ceramic space transformer 250 and a multi-layer organic flip chip carrier 251 which is attached to the bottom of the ceramic substrate 250. The multi-layer organic flip chip carrier 251 has a multi-layer of circuit patterns to transform the space of the contactors to the wider pitch of the electrodes on the upper surface of the space transformer 250.

(3) The paragraph from page 18, line 22 to page 18, line 32 has been amended as follows:

The multi-layer organic flip chip carrier 251 is preferably designed to establish a circuit pattern unique to a particular customer while the ceramic substrate 250 has a standard circuit pattern. It is possible to achieve the space transformer circuit patterns more quickly and inexpensively than the example of Figure 7A by forming the customer specific circuit patterns only on the multi-layer organic flip chip carrier 251. Further, the multi-layer organic flip chip carrier 251 can be removed and fabricated again on the same ceramic substrate 250 to create new circuit patterns for repair, design change, etc.

(4) The paragraph from page 20, line 19 to page 20, line 29 has been amended as follows:

Similar to the example of Figure 8, an adhesive 243 is applied (under filled) to the space created between the space transformer 250 and the contactor carrier 222. Further, an adhesive 246 is applied to the space created between the space transformer 250 and the probe card 260. Since the connection between the probe card 260 and the space transformer 250, and the connection between the space transformer 250 and the contactors 230 ~~is~~ are made by the flip chip bonding and the adhesive under fill, reliable and stable interconnection with high current capacity and low connection resistance can be achieved.

(5) The paragraph from page 20, line 30 to page 21, line 8 has been amended as follows:

Figure 10 is a cross sectional view of a further example of structure of the probe contact assembly of the present invention. In this example, a flexible PCB (printed circuit board) 280 is used which replaces the probe card 260 and the space transformer 250 in the examples of Figures 8 and 9. A holding block 290 is provided to securely support the flexible PCB 280 in the probe contact assembly. The flexible PCB 280 has signal patterns which enlarge the pitch of the contactors 230 to the pitch of the pin cards in the test head. The flexible PCB 280 is directly connected to the pin cards in the test head (not shown), thus, it also eliminates the pogo-pins 141 and coaxial cables 124 in Figures 2-3.

(6) The paragraph from page 21, line 9 to page 21, line 23 has been amended as follows:

In this example, the flexible PCB 280 and the cantilever contactors 230 are connected through the flip chip bonding.

For this purpose, the solder bumps 285 are formed on the flexible PCB 280 in advance. In the same manner as described with reference to Figures 8 and 9, the solder bumps 285 are positioned on the top ends 233 of the cantilever contactors 230 and heated for reflow, thereby bonding the solder bumps 285 to the top ends 233 of the contactors 230. Similar to the examples of Figures 8 and 9, an adhesive 243 is under filled in the space created between the flexible PCB 280 and the contactor carrier 222. Since the probe card, space transformer, pogo-pins and coaxial cables in the other examples can be obviated, the configuration of Figure 10 is able to dramatically reduce the overall cost of the probe contact assembly.

(7) The paragraph from page 32, line 17 to page 32, line 30 has been amended as follows:

Figures 20A-20B are diagrams showing details of the cantilever contactor of the present invention wherein an angle of cantilever is 60°. Figure 20A is a front view of the cantilever contactor, and Figure 20B is a perspective view of the cantilever contactor. In the example of Figures 20A-20C, the diagonal beam has an angle 60° relative to the vertical line as shown in Figure 20A. As shown in Figure 20B, the cantilever contactor 230 in this example has the same thickness throughout. The top end 233 of the cantilever contactor 230 has a width larger than that of the upper beam

236. When mounted on the contactor carrier 222 (Figures 6-10), the upper beam 236 is secured in the through hole of the contactor carrier 222 and the top end 233 is attached to ~~with~~ the upper surface of the contactor carrier.

(8) The paragraph from page 32, line 17 to page 32, line 30 has been amended as follows:

The enlarged top view of Figure 25C shows many square or rectangular through holes 225. The through holes 225 are aligned in the matrix manner to mount the cantilever contactors 230 there through. Examples of sizes of the layout of the through holes 225 are, L=50μm, R=106μm, S=106μm, X=212μm, and Y=212μm. The enlarged view of Figure 25D shows many diagonal through holes 225 in cross section. As noted above, an example of thickness of the contactor carrier 222 is about 500μm. As shown in the top view of Figure 25C, the diagonal through hole 225 has a square shape in top view with the size of 50μm by 50μm, and in the angle 45° relative to the vertical line.